

ABSTRACT

Methods for making various titanium base alloys and titanium aluminides into engineering components such as rings, tubes and pipes by melting of the alloys in a vacuum or under a low partial pressure of inert gas and subsequent centrifugal casting of the melt in the graphite molds rotating along its own axis under vacuum or low partial pressure of inert gas are provided, the molds having been fabricated by machining high density, high strength ultrafine grained isotropic graphite, wherein the graphite has been made by isostatic pressing or vibrational molding, the said molds either revolving around its own horizontal or vertical axis or centrifuging around a vertical axis of rotation.